October 30, 2001

Robert J. Whiting Chief, Regulatory Branch U.S. Army Corps of Engineers St. Paul District St. Paul. MN 55101-1638

RE: 94-01298-IP-DLB

Dear Mr. Whiting:

We have received and reviewed the draft Crandon Mine Project EIS Significance Criteria Document, dated September 2001. Thank you for the opportunity to review this document. Based on our review and content of the comments we strongly encourage your agency to provide for a second review of the significant criteria document once you have reviewed and incorporated comments received from the Cooperating Agencies and Tribes. Our comments center on criteria developed, criteria used in decision making, specific resource criteria, and the lack of an environmental justice criteria.

As discussed during the meeting held by the COE on September 21 in Madison, Wisconsin, many of the significance criteria listed within this draft document are in need of discussion and further justification prior to many of the reviewers being able to provide meaningful comment on the appropriateness of the criteria. Except for the criteria relating to regulatory exceedence, it is very difficult to comment on the criteria based on research or best professional judgement without the benefit of discussing the rationale with the specialist that has set the particular criteria. Discussions between the Cooperating Agencies and Tribes with the COE and/or Montgomery Watson Harza resource specialists are needed and would be very beneficial to help explain the specific criteria listed for each resource category. We hope that discussions can occur with the resource specialists and that this document will continually be updated to reflect the concerns/issues of the project and reviewers. Also, each of the resource sections begins with the statement, "If any of the following impacts would occur, they will be considered significant". The criteria then listed are criteria that will be used to identify these significant impacts. Will the COE have a second set of criteria that will be set at levels that will identify and prevent impacts prior to them becoming significant? For example, see comment #3 below. Overall, it is not clear what approach will be used (risk analysis/management) in setting the threshold for the resources. The COE needs to identify how it will deal with values close to the threshold. Even though

standards have been set to protect the majority of the resources, we encourage the COE to conduct additional analysis to recognize that many of the resources that could be impacted are much more sensitive and have several types of significance associated with them (cultural, ecological, diversity) such as wild rice. Therefore, these resources most likely fall within the sector that would not be protected by the standards thus requiring stricter standards or thresholds.

For regulatory based criteria, a table outlining the criteria standards should be added as an appendix to the document, along with the proper regulatory citation(s).

In several sections of the draft document reference is made to the use of best professional judgement and other projects that were subject to NEPA to help establish significance criteria. The document needs to identify the projects that would be used in this effort. However, the criteria should be based on actions that affected the same type of environment/ecological systems. If other projects/project types are going to be used to aid in the development of criteria, then these projects should also be screened to ensure that they are a good fit for this situation. Also, the use of best professional judgement should be limited. At the level of an Environmental Impact Statement, the determination of impacts or their significance should be supported by analysis with site specific data more so than by best professional judgement. Therefore, the COE should use best efforts to base these criteria on site specific information. The use of data from outside of the project site needs to be qualified and limited in its use.

1) Section 2.0 Purpose of Significance Criteria

This section indicates that the purpose of setting criteria is to clearly identify the process that was used to determine significant impacts. However, what the document does not indicate is how this information (determination of significant impacts) will be used in the decision making process. It certainly is important to be able to determine the intensity and severity of adverse impacts associated with the proposed mining project. The COE needs to identify how these conclusions will be incorporated in the overall analysis and decision making, such as decisions on approval or denial of the permit, change in project design, and appropriate mitigation measures.

2) Section 3.1 Air Quality

3.1.2 Rationale: Criteria may need to reflect the standards that will be in place if the Forest County Potawatomi air re-designation goes through.

3) Section 3.2 Aquatic Biological Resources

- 3.2.1 Significance Criteria: For the first bullet, is there a specific length of time that the reduction in flows/levels can not be occurring? For instance, is it based on a 30 day average or is it a one time occurrence?
- 3.2.2 Rationale: The non-regulatory criteria need further explanations as to how the percent or percentage listed was chosen. The criteria should be set at a percentage where there is no impact and not at a level where a significant impact has already occurred. For instance, if a 20%

reduction in existing flow in a given stream causes a potential 25% decrease in fish biomass, then perhaps the criteria should be set at a reduction flow of 10%, so that the 25% reduction in biomass does not occur. With the limited information provided in this document as to how or why the non-regulatory criteria were selected, it is difficult to determine at what level impacts can be avoided.

Is the percentage loss or reduction, as stated in several of the significance criteria for the aquatic biological resource, based on losses from a known baseline, or will it be determined based on losses below a known low-end of a natural fluctuation?

Also, there is no mention of the Sokaogon Chippewa (Mole Lake) Water Quality Standards in the Rationale section.

5) Section 3.4 Ecosystem

This section states that significance criteria have not been developed specifically for the ecosystem impact analysis. This section plans to evaluate the individual parts of the ecosystem, i.e., wetlands, aquatic resources, wildlife, etc., to determine if the Proposed Action would significantly affect the ecosystem. This section does not seem to indicate that potential "insignificant" impacts to parts of the ecosystem, may in fact become a "significant" impact to the ecosystem when combined with other "insignificant" impact(s). More discussion should be held on how the overall ecosystem can be evaluated.

6) Section 3.5 Groundwater Hydrology

Section 3.5.1 Significance Criteria: this section only mentions the potential impact to private water wells, but does not mention any community wells or agricultural wells that are within the potential project impact area. Also, will potential impacts to future groundwater resources be evaluated; for example, if Mole Lake Tribe, within the next 30 years, needed to put a community well on the far eastern edge of their Reservation or if an individual built a new home in the area, would the presence of the mine make locating a well within the drawdown zone more expensive to install or even preclude the Tribe or individual from drilling the well?

7) Section 3.6 Groundwater Quality

Section 3.6.2 Rationale: The Rationale states that the WDNR has both enforcement standards and preventative action limits (PALs), but it does not state if an exceedance of a PAL would be considered a significant impact or not. Also, this section does not state at what distance from the source the contaminant would be monitored for the COE to call it a significant release or impact; i.e, right at the TMA?, 1200 feet from the TMA? At the site boundary? Etc.

8) Section 3.8 Land Use Plans and Conflicts

Section 3.8.2 Rationale: How will the COE handle this issue if the court case between the mining company and the Town of Nashville is not settled at the time of the draft EIS?

9) Section 3.9 Mineral Resources

It is not clear what ecological, health or economic impact this section is addressing. Will this section look at the no-action alternative of no mining? Will this section examine the national need for the metals? Will this section look into how recycling of copper and zinc may help minimize the need for the mine?

10) Section 3.10 Noise and Vibrations

This section states that the potential impacts for noise and vibrations would be included in discussions under the other resources and that the resource specialists would develop appropriate criteria to determine the significance of the impact caused by the change in noise or vibration levels. While it is listed under the Traditional Cultural Property Section (Section 3.16.1, fourth bullet), noise and vibration levels do not appear in other resource impact evaluations, unless it is assumed to be part of other impact descriptions such as found under Threatened and Endangered Species, third bullet, as a long term disturbance to species migration and dispersal. Noise and vibration levels could also impact health and safety, recreation resources, socioeconomics, transportation, and wildlife resources, but it does not appear to be a criteria factor for any of these resources. The individual resource specialists need to evaluate how noise and vibrations may impact these resources.

11) Section 3.12 Socioeconomics

Section 3.12.1 Significant Criteria: More justification needs to be provided as to why the percentage of change in the criteria was selected. Also, what will occur if these significant impacts do occur? For example, if the local population has a change of greater than 5%, what will the COE have the mining company do? Also, in this section a lot of criteria seem very difficult to determine since they are so vague. For instance, in the sixth local area bullet, Social Environment, it states that if the project would force a major change in lifestyle for some or all persons in any of the social groups identified within the local area. How will "some" be defined? How and by whom will this be determined? Other words in the following bullets are just as vague: a large percentage; severe disruption; severe emotional, etc. The Rationale section states that the socioeconomics team will define these terms by examining the way in which project benefits and adverse effects are distributed throughout the community. Without these terms defined up front, it is hard to comment on the significance criteria which will result.

12) Section 3.13 Surface Water Hydrology

Section 3.13.1 Significance Criteria: This section, as stated above, should have criteria that can identify the significant impacts prior to their occurrence. For instance, if the mine causes an increase in eroded lake shoreline, then this is a significant impact, but why should the COE wait until a shoreline is eroded before action is taken? The actual significance criteria used should be below the criteria listed so that these significant impacts do not occur.

13) Section 3.14 Surface Water Quality

Section 3.14.1 Significance Criteria: Why is the second bullet, "Improvement of any surface water quality standards that are currently exceeded" considered a significant impact?

Improvements to the current state are definitely something to consider when evaluating project impacts but are these to be considered significant impacts along with impacts that are potentially harmful to the environment? If an improvement causes other areas to be degraded, then it should be included, i.e., to improve a stream, a wetland may be degraded. These tradeoffs should be listed.

14) Section 3.16 Traditional and Cultural Properties

Section 3.16.2 Rationale: The first paragraph states that for this evaluation, the significance criteria will be applied only to properties or districts that are eligible for inclusion in the NRHP, have already been listed in the NRHP, and all catalogued human burial sites. Besides involving a Tribal Historic Preservation Officer, what role will the Tribes and BIA be playing in assisting the COE in determining TCPs and in identifying significant impacts? Do TCPs need to be listed or be eligible for listing on the NRHP to be of significance?

15) Section 3.17 Transportation

Section 3.17.1 Significance Criteria: First bullet: When was the most recent "average annual daily traffic (AADT)" calculated for the Crandon area? Also, shouldn't this Transportation Section include rail and truck traffic issues as well as what is listed? Will there be any criteria linked to the potential increased use of the local Crandon airport?

16) Section 3.18 Vegetation Resource

Section 3.18.1 Significance Criteria: The first bullet seems very difficult to evaluate since it can not be determined if a significant impact has occurred until after the mining is completed (30 years or so) and it is found that restoration is not successful. These criteria need to be able to be applied to this possibility now, not after 30 years of activity. For instance, it can currently be predicted that due to the TMA, that that area will not be restored to upland forest. Also, the non-regulatory percentages listed within the first three bullets need more justification.

17) Section 3.19 Visual Resources

Section 3.19.1 Significance Criteria: How and by whom will "sensitive viewpoints" be defined? Why will visual resource impacts only be considered as significant after five growing seasons or after reclamation is completed? Short-term visual impacts are part of the Traditional Cultural Properties impact assessment and should also listed in that section. For the second bullet, what exactly will be covered under "any degradation of visual resource qualities along the 24-mile stretch of the Wolf River ..."? Will this include increased truck traffic that may use Highway 55?

18) Section 3.20 Wetland Resources

Section 3.20.1 Significance Criteria: this section should include criteria regarding the compensation wetlands that will be located in Shawano County. More justification needs to be given regarding the 50% loss of hydrophytic plants as stated within bullet #2. Also, as stated in the fourth bullet, more work needs to be conducted on evaluating the functions of the wetlands prior to these criteria being finalized. How and when will this work be done by the COE?

19) Section 3.21 Wild Rice

Section 3.21.1 Significance Criteria: More justification and discussion are needed regarding the percentages stated in the first three bullets. Specifically, the Mole Lake Reservation depends on the wild rice for subsistence and for economics purposes, and losses in the magnitudes listed in this section would be very significant to them. How will some of these criteria be measured? Will the criteria needs all be reflected in the site monitoring plans? Also, are there any areas of wild rice growth that were publically available prior to the proposed mine project but are no longer accessible by the Tribes since they are now located on mine property?

20) Section 3.22 Wildlife Resources

Section 3.22.1 Significance Criteria: The criteria listed within the two bullets need more discussion and justification. Does 20% loss of a specific habitat correlate to a 20% loss of a particular animal, or does it mean a greater loss of animals and diversity? What is meant by adverse effects in the second bullet? Also, the Aquatic Biological Resources section (3.2) has criteria relating to loss of fish and aquatic species. Shouldn't this section reiterate those criteria and have additional criteria related to terrestrial species and species diversity? This section also should tie in with the Recreation Resources as a loss in wildlife may correlate to a loss of fishing and hunting resources.

21) There is no specific section that relates to Environmental Justice and what criteria would be used to determine if impacts were significant on any one minority population.

When the EPA's Hydrological Simulation Program Fortran (HSPF) model is complete, results may be able to assist the COE in determining potential impacts regarding several of the resources listed within this significance criteria document.

Thank you for the opportunity to review this document and to provide comments to you. If you have any questions on the above, please give me a call at 312-886-7252.

Sincerely,

Daniel J. Cozza, Crandon Mine Project Manager U.S. Environmental Protection Agency

cc:

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